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(71)Applicant: NIPPON SHOKUBAI CO LTD

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(72)Inventor: HAYASHI CHIHARU

HARADA NOBUYUKI SHIMOMURA TADAO

## (54) COLD MAINTAINING METHOD

## (57) Abstract:

PURPOSE: To maintain cold reserving effect for a long period of time without producing dew at the time of reserving cold by arranging a resin film, formed on one side of a water absorbing sheet, is arranged at the side of refrigerant.

CONSTITUTION: Cold reserving is carried out employing a water absorbing composite, formed as a water impermeable resin film manufactured by coating a resin on one side of a water-absorbing sheet, manufactured by dispersing and adhering a water-absorbing polymer onto a fibrous substrate, and refrigerant. In this case, the resin film is arranged at the side of the refrigerant. The coating method of the resin is preferably extrusion coating method. Solid matter, such as ice, dry ice and the like, for example, and liquid, such as liquid nitrogen, ice water and the like, are employed as refrigerant. When the resin film surface is arranged at the side of refrigerant, the water absorbing polymer layer is exposed to a surface opposite to the refrigerant where by condensate is not produced and the water absorbing polymer layer, which has absorbed condensate, developes heat insulating effect and, therefore, cold heat maintaining time can be prolonged. On the other hand, when fresh vegetables are positioned at the side of the water absorbing polymer layer, the freshness can be improved remarkably by the moisture

conditioning effect of the water absorbing polymer.

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